

REMARKS

Claims 110-136 are pending in this application. By this Amendment, the Title has been amended, claims 1-109 are canceled, and claims 110-136 are added. No new matter is added by these amendments. Reconsideration of the application in view of the above amendments and the following remarks is respectfully requested.

Applicant confirms that Claim 110-136 continue to read on elected Species A, Figure 4, in Group I.

The Office Action states that Applicant has not filed a certified copy of the JP 2004-043114 application as required by 35 U.S.C. 119(b). Applicant will address priority at a later date.

The Office Action objects to the Title. Applicant has amended the title as suggested by the Examiner.

The Office Action objects to claims 14-109 because the numbering of new claims cannot replace that of the old claims. By this Amendment, Applicant has canceled claims 1-109 and added new claims 110-136 to simplify the claim structure.

The Office Action objects to claim 14 for a lack of proper antecedent basis. By this Amendment, Applicant has amended claim 110 (correlates to previous claim 14) to provide proper antecedent basis.

The Office Action objects to claim 20 for lack of clarity and no support in the specification. By this Amendment, Applicant has amended claim 114 (correlates to previous claim 20) to obviate the Examiner's objection. (Support for the amendment is in page 20, lines 14-16, for example).

Accordingly, Applicant respectfully requests that the various objections be withdrawn.

The Office Action rejects claims 14-17, 20 and 27-35 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,610,683 to Takahashi. The rejection will be addressed as it pertains to claims 110-136. The rejection is respectfully traversed.

Independent claim 110, and similarly independent claim 131, recite an exposure apparatus comprising a prevent device which prevents gas in the exposure region from flowing into the measurement region, wherein gas that contacts the substrate changing from the gas in the measurement region to the gas in the exposure region according to the movement of the movable member.

Takahashi discloses placing a wafer inside a cassette (an "exposure region") and then filling the cassette with a liquid. (See Takahashi's Column 6, Lines 22-48.) Takahashi also discloses creating a negative pressure inside of the cassette to get rid of air bubbles. (See Takahashi's Column 6, Lines 22-48.) In addition, Takahashi discloses a vacuum pump for removing bubbles from the liquid. (See Takahashi's Column 6, Lines 22-48.) However, in the claimed exposure apparatus, the substrate is not enclosed in a cassette, and instead, the substrate is exposed to gas that passes through a measurement region and then to an exposure region. To prevent gas from the exposure region from flowing back to the measurement region, a prevent device is used.

Takahashi fails to disclose gas that contacts the substrate and changes from gas in the measurement region to gas in the exposure region according to the movement of the movable member. Instead, Takahashi prevents gas from moving from a measurement region to an exposure region because the exposure region is inside the cassette, which is sealed and filled with a liquid. Thus, Takahashi does not disclose an exposure apparatus comprising a prevent device which prevents gas in the exposure region from flowing into the measurement region, wherein gas that contacts the substrate changing from the gas in the measurement region to the gas in the exposure region according to the movement of the movable member.

Accordingly, Applicant respectfully requests that the rejection be withdrawn.

The Office Action rejects claims 14-17, 20-23, 28 and 35 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 6,638,672 to Deguchi. The rejection will be addressed as it pertains to claims 110-136. The rejection is respectfully traversed.

Independent claim 110, and similarly independent claim 131, recite an exposure apparatus including an exposure region and a measurement region.

In regard to Deguchi, the Office Action asserts that Deguchi discloses an exposure apparatus including an exposure region 22 and a measurement region 14. (See Deguchi's Fig. 7.) Deguchi discloses a system that controls air flow between the exposure apparatus and an LL chamber 14. (See Deguchi's Fig. 7.) The Office Action asserts that the LL chamber 14 is the alleged "measurement region." However, Fig. 7 of Deguchi merely shows a relationship between the exposure apparatus and the associated apparatuses. (See Deguchi's Brief Description of the Drawings regarding Fig. 7.) Based on the brief description of Deguchi's Fig. 7, the LL chamber in Deguchi is a separate apparatus from an exposure apparatus. Therefore, Deguchi does not disclose an exposure apparatus including an exposure region and a measurement region so as to prevent the gas in the atmosphere of the exposure region from flowing into the measurement region and thus, does not disclose every feature of the independent claims.

Accordingly, Applicant respectfully requests that the rejection be withdrawn.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of the claims are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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MAC:MSR/mkg

Attachment:
Petition for Extension of Time

Date: October 1, 2009

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